

REMARKS

Applicant requests favorable reconsideration and allowance of this application in view of the foregoing amendments and the following remarks. Claims 1 and 4-21 are pending in this application, with Claims 1, 19, 20 and 21 being independent.

Claims 2 and 3 have been cancelled without prejudice. Claims 1, 4, 6, 7-9, 11, 13-15, 19, and 20 have been amended and Claim 21 has been added. Applicant submits that support for the amendments can be found in the original disclosure, at least for example in Figs. 7, 8, and 11 and at page 4, lines 24-25 of the specification. Therefore, no new matter has been added.

Claim 7 has been objected to because the phrase at lines 3-4, “a first more largest occurrence frequency” is not grammatically correct. Applicant has amended that claim and submits that the amendment overcomes the Examiner’s objection. Accordingly, withdrawal of the objection is requested.

Claims 1-20 stand rejected under 35.U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner objected to the recitation of a border block including an object area and a background area, and asserted that Fig. 8 shows the border blocks are between background blocks and foreground blocks but do not include the foreground blocks and the background blocks. Applicant respectfully disagrees, because the previously pending claims recited that the border blocks include an object area and a background area, not an object block and a background block. Applicant submits that Figs. 7 and 8, for example, support that a border block may contain a portion of an object area and a portion of a background area. Nevertheless, without conceding the propriety of the rejection and merely to expedite prosecution, Applicant has amended the claims to recite that border blocks form a

boundary area between the object blocks and the background blocks. That feature is supported at least in Figs. 7 and 8 and at page 4, lines 24-25 of the specification. Therefore, favorable reconsideration and withdrawal of the rejection is requested.

Claim 11 stands rejected under 35.U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended that claim in view of the Examiner's comments, and withdrawal of this rejection is respectfully sought.

Claims 1-3 and 15-20 stand rejected under 35.U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,343,097 (Kobayashi et al.) in view of either U.S. Patent No. 5,999,651 (Chang et al.) or the article entitled "Dynamic Segmentation of Traffic Scenes" (Giachetti et al.). Applicant respectfully traverses this rejection for the reasons discussed below.

As recited in independent Claim 1, the present invention includes, *inter alia*, the features of classifying blocks into one of an object block, a background block, and a border block in accordance with a frequency of occurrence of a detected motion vector, the border blocks forming a boundary area between the object blocks and the background blocks corresponding to a background area of an object, and setting an initial contour of the object in accordance with the border blocks and extracting an object area using the set initial contour and an active outline model. Independent Claims 19 and 20 recite similar features. Applicant submits that the cited art fails to disclose or suggest at least those features.

Kobayashi discloses classifying blocks into an object block and a background block in accordance with a histogram of detected motion vectors (see, e.g., column 9, lines 34-40). However, that patent does not classify a border block together with an object block and a

background block in accordance with the histogram of detected motion vectors. Instead, a contour block in Kobayashi is decided as an object block which is adjacent to a block with a different motion vector (see Fig. 8B and column 10, lines 33-38). Therefore, that patent fails to disclose or suggest the above-mentioned combination of features, and in particular fails to disclose or suggest at least the feature of classifying blocks into one of three types in accordance with detected motion vectors.

Applicant submits that the other cited art also fails to disclose or suggest at least the above-mentioned features. Chan and Giachetti disclose setting an initial contour to extract an object area, but they also fail to disclose or suggest at least the feature of classifying blocks into one of an object block, a background block, and a border block in accordance with a frequency of occurrence of a detected motion vector. Therefore, Applicant submits that the present invention recited in independent Claims 1, 19, and 20 is patentable over the cited art, whether that art is considered individually or taken in combination.


Newly-presented independent Claim 21 has features similar to Claim 1 but is drafted in non-means-plus-function format. Claim 21 is patentable for reasons similar to Claims 1, 19, and 20.

The dependent claims are believed patentable for at least the same reasons as the claims they depend from, as well as for the additional features they recite.

In view of the foregoing, Applicant submits that this application is in condition for allowance. Favorable consideration, withdrawal of the outstanding objection and rejections, and an early Notice of Allowance are requested.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Brian L. Klock', is written over a horizontal line.

Attorney for Applicant

Brian L. Klock

Registration No. 36,570

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200
BLK/lmj